EUROPEAN PATENT OFFICE

Patent Abstracts of Japan

PUBLICATION NUMBER

10147653

PUBLICATION DATE

02-06-98

APPLICATION DATE

20-11-96

APPLICATION NUMBER

08326017

APPLICANT :

GUNZE LTD:

INVENTOR:

MITA AKIRA;

INT.CL.

C08J 5/18 B29C 55/02 C08L 67/04 // B29K 67:00 B29L 7:00

TITLE

BIODEGRADABLE ORIENTED FILM

ABSTRACT :

PROBLEM TO BE SOLVED: To obtain the subject film having excellent tensile strength, tensile modulus, and haze value, by at least unidirectionally orienting a composition in which a hydroxybutyrate/hydroxyvalerate copolymer and a polylactic acid-based polymer are the essential components.

SOLUTION: This film is obtained by melting/blending a composition in which (A) a 3-hydroxybutyrate/3-hydroxyvalerate copolymer and (B) a polylactic acid-based polymer are the essential components, followed by extrusion, cooling, and then orientation at least unidirectionally. The component A includes an aliphatic polyester-based biodegradable polymer having a melting point of 140-180°C and a number average molecular weight (M_n) of 10^4 - 10^6 , which is produced by a microorganism such as Alkaligenes eutrophus. The weight ratio of the component A vs. the component B is (80:20)-(20:80), preferably (70:30)-(30:70). This method allows to produce the objective film that is finally biologically degraded in nature into hamless water and carbon dioxide.

COPYRIGHT: (C)1998,JPO